

To: R. M. Shepherd -
ASBESTOS HANDLING

Issued

October 1973

Revised

July 24, 1978

Page 1 of 6

From: W. E. Thomas, SKW

NOTES AND REFERENCESPURPOSE

This procedure presents the permissible asbestos dust exposure limits, methods of controlling exposure, respiratory protective equipment, disposal, and methods of handling.

The principle sources of exposure to airborne asbestos dust at Sabine River Works have been:

- 1) Removing old insulation;
- 2) filter aids; 3) waste disposal;
- 4) mixing asbestos cement; 5) cutting transite; 6) removal of clothing after completing asbestos insulating duties.

A. DEFINITIONS

1. Asbestos Material - Any material containing asbestos.
2. Particulate Asbestos Material - Finely divided particles of asbestos material.
3. Visible Emissions - Any emissions which are visually detectable without the aid of instruments and which contain particulate asbestos material.
4. Removal - The taking down or stripping of Friable Asbestos Material.

- Reference Du Pont Engineering Standard 5 4 T. OSHA Regulation, Section 1910.93 and 1910.141. Asbestos dust concentrations in air shall not exceed an eight hour time weighted average of two (2) fibers longer than five (5) microns per cubic centimeter of air. At no time may the concentration exceed a ceiling of 10 fibers longer than five (5) microns per cubic meter.

1910.93 - 1910.93 g

revised in Subpart 2
@ 1910.1000

Asbestos in 1910.1001

1910.141 is similar

note by RMS

Recordkeeping

1910.1001(i)(1) not covered

Medical examination

Medical records

DUP 0961250

PLAINTIFF'S
EXHIBIT

DUP-201

Pg. 2 of 6

NOTES AND REFERENCES

5. Friable Asbestos - Any material that contains more than 1% asbestos by weight and can be crumbled, pulverized, or reduced to powder when dry, by hand pressure. (Transite is not friable asbestos material.)
6. Adequately wetted - Sufficiently coated with water or aqueous solution to prevent dust emissions.

B. GENERAL RULES

1. Each job involving the handling of asbestos must be thoroughly reviewed.
2. Insulation to be removed and discarded should be adequately wetted prior to and during removal. Material removed shall not be dropped or thrown to the ground, but shall be carefully lowered to ground level.
3. Each employee handling asbestos or exposed to the dust must wear an approved respirator where concentrations may be above the permissible exposure limits.
 - The 3M respirator, Type 8710 is approved for use, CTI-87-50-450. Contact the Safety Division for other approved respirators and filters.
4. Asbestos free insulation will be used on all new or altered facilities.
5. All hand operated or power operated tools which may produce or release asbestos fibers in excess of the permissible exposure limits shall be provided with a dust catching system.
 - Vacuum area daily to prevent accumulation of asbestos dust on ledges, shelves, floors, and machines. Air hoses or dry sweeping is not permitted.

DUP 0961251

Pg. 376

NOTES AND REFERENCESC. ASBESTOS - MATERIAL MIXING

1. Cement, mortar, coatings, grout, and plaster containing asbestos shall be mixed in closed bags or other containers.
2. Any dried out cement should be discarded. Do not attempt to re-work it.

D. WASTE DISPOSAL

1. Asbestos waste shall be collected and disposed of in sealed, impermeable bags or containers. .
CTI - 87-03-110
Caution labels shall be attached conforming to Figure 2.
2. The area Mechanical Foreman following the job should prepare a purchase requisition and shipping notice (SR-630). The vendor is BFI. The requisition must include their Code No. PA#367.
3. Until the material is picked up by the vendor, it must be stored in a place where the bags will not be punctured or otherwise damaged.

When the material is shipped, the responsible Mechanical Foreman must fill out the Part I section of a TDWR Industrial Waste Shipping Control Ticket form, which the carrier truck driver will bring with him for each shipment or truck load.

- Asbestos contaminated clothing and throw away respirators shall be handled in sealed labeled bags with instructions for proper handling.

- The Shipping notice must bear the following: SRW Code-13
Description - Used Material, Primarily insulation containing asbestos.
Class - I
TDWR Code - 170750
Disposition - Off-Site

P. 412

NOTES AND REFERENCES

E. RESPIRATORY EQUIPMENT

1. Respiratory protection shall be provided and worn by all personnel in areas where exposure limits may be exceeded.
2. Atmosphere supplying respirators (self-contained units) are to be worn when concentrations are expected to exceed 100 times the limit.
3. Each employee who may use a respirator shall be instructed in its use and in testing it for proper fit.

- EXAMPLES:
 1. During time when local exhaust ventilation is not sufficient.
 2. During known period of over exposure.
 3. Emergencies.
 4. During the spraying of asbestos* and for the demolition and removal of asbestos insulation.
- The respirator shall be cleaned and disinfected after each use or discarded in waste bags if they are the throw away type.
- Exclusively assigned respirators should be cleaned at least after each days work.

F. HYGIENE

1. Separate lockers for work clothes and street clothes must be provided to prevent contamination for known exposure to high level concentrations.
2. Special clothing (coveralls) should also be provided for high concentrations such as spraying and demolition of asbestos insulation.
3. Food, gum, tobacco or any edibles shall not be consumed in areas where asbestos is being handled or fabricated.

G. SAMPLING

✓ Monitoring is required where employees might be exposed to asbestos dust to determine the amount of exposure.

- Intervals between monitoring of samples shall not exceed six months. Contact the Industrial Hygiene Monitoring Group, Bldg. 5 for assistance.

Pg. 5 of 6

NOTES AND REFERENCES

H. CAUTION SIGNS AND LABELS

1. Signs shall be at all approaches to areas where asbestos concentrations may be above permissible exposure limits. (See Figure 1)
2. Labels conforming to Figure 2 shall be used to identify containers of raw materials, scrap, waste and other products containing asbestos.

- The signs shall be placed at a sufficient distance to permit an employee to read the signs and take necessary precautions before entering the area.

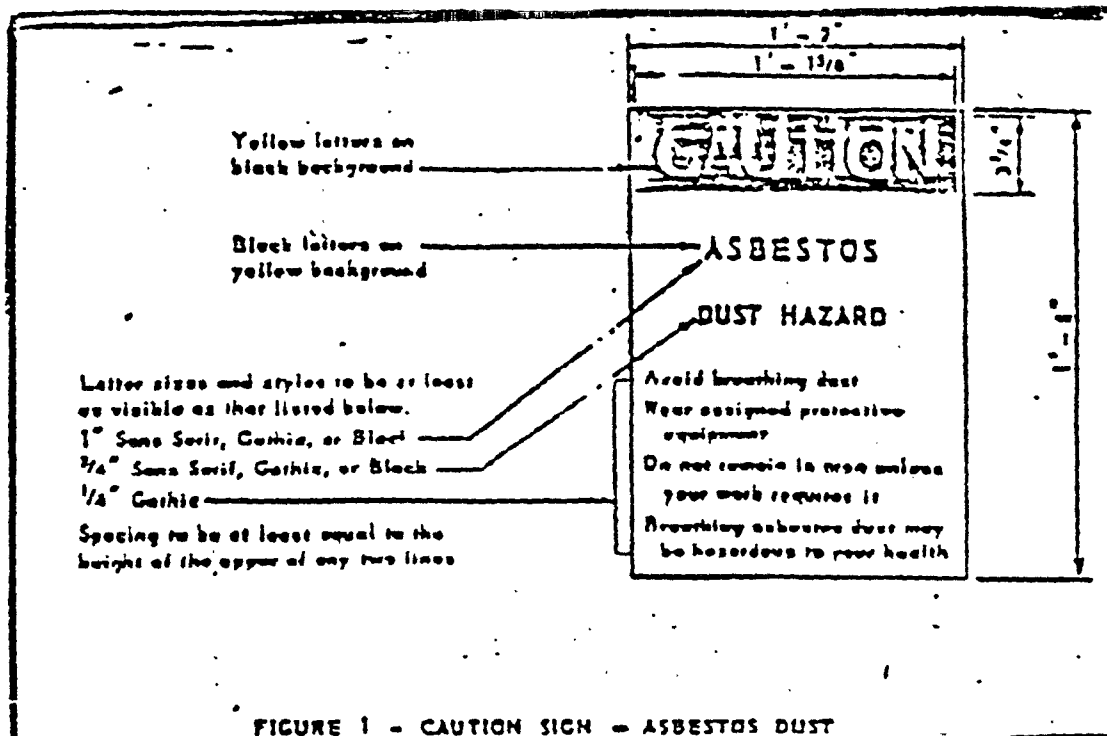


FIGURE 1 - CAUTION SIGN - ASBESTOS DUST

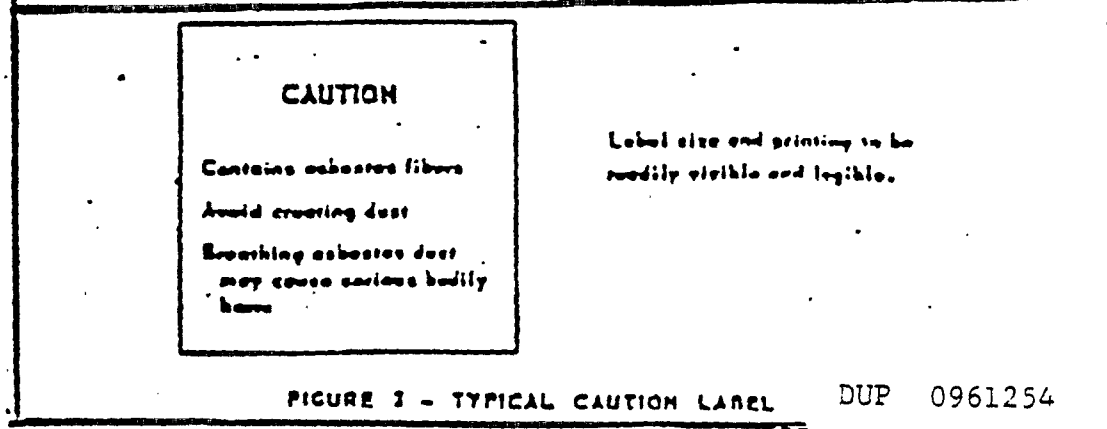


FIGURE 2 - TYPICAL CAUTION LABEL

DUP 0961254

July 24, 1978

Pg. 6 of 6

NOTES AND REFERENCESI. EPA REGULATIONS ON ASBESTOS

1. The Environmental Protection Agency requires certain reporting procedures when operational facilities containing asbestos are being demolished. Reporting procedures are also required involving renovation of 80 meters (262.4 ft.) of pipe or more than 15 square meters (161.4 sq. ft.) of friable asbestos.
 - This requirement does not pertain to transite siding because transite is not considered "friable".
 - Reference Subpart B - National Emission Standard for asbestos.
2. It is the responsibility of the Mechanical Department to ascertain those locations where asbestos exists and to ensure notification prior to demolition or renovation.
 - The Industrial Hygiene Monitoring Group in Building #5, can assist identifying insulation that contains asbestos.
3. If demolition or renovation as outlined in Paragraph I, 1, above is to be done, notify the EPA Regional Administrator, Dallas, Texas twenty days prior to commencement of demolition or removal stating the measured or estimated amount present.
 - Provisions are made for emergency renovation and the Environmental Coordinator, Ext. 6421 can assist with this requirement.